

**APPENDIX**  
**(accompanying Amendment f July 15, 2003)**

**09/642,160**

**IN THE CLAIMS:**

Amend claims 38, 39, 46-50, 57, and 67 as follows:

38. (Amended) A [pharmaceutical] delivery system for oral delivery of the antioxidants vitamin C and vitamin E to obtain high concentrations thereof and a controlled ratio between vitamin C and vitamin E in blood plasma in humans or animals, characterized in that it has a slow release [only] of vitamin C and a plain release [only] of vitamin E;

wherein vitamin C is present in an amount in the delivery system so as to deliver a daily dose corresponding to 60 mg - 2 g of vitamin C, and vitamin E is present in an amount in the delivery system so as to deliver a daily dose corresponding to 50 mg - 500 mg of  $\alpha$ -tocopherol, and the antioxidants are present in amounts so as to obtain vitamin C and vitamin E in a ratio in the blood plasma of 1:1 to 3:1;

wherein the solubility of vitamin E is such that at least 90% of vitamin E is dissolved in less than 30 minutes under the conditions of Test B; and

wherein the solubility of vitamin C is such that less than 40% of vitamin C is dissolved after 1 hour under the conditions of Test A; and

wherein said delivery system achieves a concentration of vitamin E in the blood plasma of at least 20  $\mu$ mol/litre and a concentration of vitamin C in the blood plasma of at least 40  $\mu$ mol/litre.

39. (Amended) A [pharmaceutical] delivery system according to claim 38, characterized in that it is a system comprising a tablet comprising at least two non-identical delivery [principals] principles, wherein

a) one delivery [principal] principle comprises

- i) vitamin C;
- ii) a pharmaceutically acceptable excipient for controlling the slow release of vitamin C; and
- iii) [optionally, at least one] other pharmaceutically acceptable [excipient] excipients; and

b) another delivery [principal] principle comprises

- i) vitamin E; and
- ii) [at least one] pharmaceutically acceptable [excipient] excipients.

46. (Amended) A [pharmaceutical] delivery system according to claim 38, characterized in that vitamin C is ascorbic acid and vitamin E is selected from the group [consisting of] comprising d- $\alpha$ -tocopheryl acetate, d- $\alpha$ -tocopheryl acid succinate, d- $\alpha$ -tocopherol, d- $\beta$ -tocopherol, d- $\gamma$ -tocopherol, d- $\delta$ -tocopherol, d- $\alpha$ -tocotrienol, d- $\beta$ -tocotrienol, d- $\gamma$ -tocotrienol, d- $\delta$ -tocotrienol, dl- $\alpha$ -tocopherol, dl- $\alpha$ -tocopheryl acetate, dl- $\alpha$ -tocopheryl calcium succinate, dl- $\alpha$ -tocopheryl nicotinate, dl- $\alpha$ -tocopheryl linoleate/oleate, and all other possible derivatives or stereoisomeric forms of the above compounds.

47. (Amended) A [pharmaceutical] delivery system according to claim 38, wherein [vitamin C is provided in an amount sufficient to deliver] the daily dose of vitamin C corresponds to 100 mg - 1.5 g of ascorbic acid [per day].

48. (Amended) A [pharmaceutical] delivery system according to claim 38, wherein [vitamin E is provided in an amount sufficient to deliver] the daily dose of vitamin E corresponds to 100 mg - 250 mg of  $\alpha$ -tocopherol [per day].

49. (Amended) A [pharmaceutical] delivery system according to claim 38, wherein the [vitamin C and E] daily dose of vitamin C and E is delivered by 1 to 8 dosage units.

50. (Amended) A [pharmaceutical] delivery system according to claim 38, wherein the [vitamin C and E are] daily dose of vitamin C and E is delivered by 1 or 2 dosage units [per day].

57. (Amended) A method of treating oxidative stress disorders [and associated diseases and conditions], said method comprising administering to an individual a combination of vitamin C and vitamin E in sufficient amounts to raise the concentration of said vitamins in blood plasma [to a level sufficient to treat oxidative stress disorders, and] to a ratio of approximately 1:1 to 3:1, in not more than 8 weeks from the first administration,

wherein vitamin C is released by a slow release formulation and vitamin E is released by a plain release formulation; and

wherein the [method achieves a] concentration of vitamin E in the blood plasma [that] is at least 20  $\mu\text{mol/liter}$  and [a] the concentration of vitamin C in the blood plasma [that] is at least 40  $\mu\text{mol/liter}$ ; and

wherein the administering is in amounts corresponding to a daily dose of 60 mg - 2 g of vitamin C and corresponding to a daily dose of 50 mg - 500 mg of  $\alpha$ -tocopherol.

67. (Amended) A method of treating oxidative stress disorders [and associated diseases and conditions], said method comprising daily administering to an individual at least one dosage unit [per day of] comprising a combination of vitamin C and vitamin E in sufficient amounts to raise the concentration of said vitamins in blood plasma [sufficiently to treat at least one oxidative stress disorder and] to a controlled ratio;

wherein said vitamin C is formulated [only] in a slow-release preparation and vitamin E is formulated only in plain-release formulation;

wherein the [method achieves a] concentration of vitamin E in the blood plasma [of] is at least 20  $\mu\text{mol/liter}$ , and [a] the concentration of vitamin C in the blood plasma [of] is at least 40  $\mu\text{mol/liter}$ ;

wherein the antioxidants are present in amounts so as to obtain vitamin C and vitamin E in a ratio in the blood plasma of 1:1 to 3:1;

wherein the at least one dosage units delivers a daily dose corresponding to 60 mg - 2 g of vitamin C and a daily dose corresponding to 50 mg - 500 mg of  $\alpha$ -tocopherol; and

wherein the formulation of vitamin E is such that at least 90% of vitamin E is dissolved in less than 30 minutes under the conditions of Test B, and the formulation of vitamin C is such that less than 40% of vitamin C is dissolved after 1 hour under the conditions of Test A.